

REMARKS

This Amendment is in response to the Office Action mailed on October 11, 2006 in which claims 1, 3, 5-9, 11, 13-15, 17, 21, 23-25, 27, 29, 30, 32-34, 36-41, 62-65, 68, and 69 were rejected. With this Amendment, claims 1, 7, 11, 21, 32, and 61 are amended and claims 14, 24, 33, and 40 are canceled without prejudice. Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

I. Rejection of Claims 11, 13-15, 17, 21, 23-25, 27, and 29-30 Under 35 U.S.C. § 102(b) as Anticipated by Rabbe et al.

On page 2 of the Office Action, the Examiner rejected claims 11, 13-15, 17, 21, 23-25, 27, and 29-30 under 35 U.S.C. § 102(b) as anticipated by Rabbe et al., U.S. Patent No. 5,702,453. With this Amendment, Applicant has amended independent claims 11 and 21 to overcome the rejection based upon Rabbe et al.

Claim 11, as amended, recites, among other elements, “the pedicle screw retainer comprising: a top, a bottom, a side wall defined between the top and the bottom, and at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the shaft, wherein the aperture is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer.” The amendment to claim 11 is supported by the specification as filed by at least FIGS. 1 and 11. Rabbe et al. does not identically disclose the combination of elements recited in either of claims 11 or 21, as amended. In contrast, Rabbe et al. discloses a “vertebral body replacement assembly 20” having “spikes (91, 120)” or a “support assembly 55” to hold the assembly in place. See Rabbe et al. at col. 6, lines 41-46; col. 8, lines 43-52; and Fig. 3.

Rabbe et al. disclose a fusion device that provides a rigid connection between the two vertebrae adjacent a resected vertebra (thus the spikes used to penetrate the end plate of the adjacent vertebra). In contrast, the device disclosed in the present application is configured to be implanted adjacent one or two disc prostheses and further secured via the posterior elements of

the resected vertebra to provide stability. The Examiner states: “The screws and screw retainers of Rabbe et al. . . . are capable of securing a pedicle to the prosthesis. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.” Applicant has amended independent claims 11 and 21 to recite structural differences between the claimed invention and the structure shown in Rabbe et al. and respectfully requests reconsideration and allowance of independent claims 11 and 21 and corresponding dependent claims 13-15, 17, 23-25, 27, and 29-30.

II. Rejection of Claims 1, 3, 5-9, 11, 13-15, 17, 21, 23-25, 27, 29-30, 32-34, 36, 38-41, and 61-62 Under 35 U.S.C. § 103(a) Based Upon Rabbe et al. in View of Downey

On page 3 of the Office Action, the Examiner rejected claims 1, 3, 5-9, 11, 13-15, 17, 21, 23-25, 27, 29-30, 32-34, 36, 38-41, and 61-62 under 35 U.S.C. § 103(a) as unpatentable over Rabbe et al. in view of Downey, U.S. Patent No. 5,147,404. With this Amendment, Applicant has amended independent claims 1, 7, 11, 21, 32, and 61 to overcome the rejection based upon Rabbe et al. in view of Downey.

Independent claims 1, 7, 11, 21, 32, and 61, as amended, recite a “pedicle screw retainer comprising: a top, a bottom, a side wall defined between the top and the bottom, and at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the [shaft or vertebral prosthesis], wherein the aperture is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer.” The amendments to claims 1, 7, 11, 21, 32, and 61 are supported by the specification as filed by at least FIGS. 1 and 11. As discussed above, Rabbe et al. does not disclose such a pedicle screw retainer structure. Nor does Downey. In contrast, Downey discloses a “vertebra prosthesis 10” that is anchored in place by “threaded members 28 of replacement discs 30.” See Downey at col. 6, lines 38-40 and Fig. 2. Downey does not remedy the deficiencies of Rabbe et al. because it does not disclose the recited structure of the pedicle screw retainer.

Independent claim 39 recites, in combination with a pedicle screw retainer, “a first endplate having a first side adapted to be coupled to a first end of the shaft and a second side coupled to a first artificial disc; and a second endplate having a first side adapted to be coupled to the first end of the shaft in place of the first endplate and a second side coupled to a second artificial disc, the second artificial disc having a different configuration from the first artificial disc.” Neither Rabbe et al. nor Downey discloses first and second endplates adapted to be coupled to first and second artificial discs having different configurations. Accordingly, independent claim 39 and its corresponding dependent claims are patentable over the combination of Rabbe et al. and Downey.

Because not all of the elements are taught or suggested by the cited art, independent claims 1, 7, 11, 21, 32, and 61 are patentable over the combination of Rabbe et al. and Downey and are presented for reconsideration and allowance along with their corresponding dependent claims.

III. Rejection of Claims 61-65 and 68-69 Under 35 U.S.C. § 103(a) Based Upon Strnad et al. in View of Downey

On page 3 of the Office Action, the Examiner rejected claims 61-65 and 68-69 under 35 U.S.C. § 103(a) as unpatentable over Strnad et al., U.S. Patent No. 6,296,665, in view of Downey. Applicant has amended claim 61 to overcome the rejection based upon Strnad et al. and Downey.

Independent claim 61, as amended, recites “a pedicle screw retainer . . . comprising: a top, a bottom, a side wall defined between the top and the bottom, and at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the vertebral prosthesis, wherein the aperture is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer.” As discussed above, Downey does not disclose the structure recited in independent claim 61, as amended. Strnad et al. does not remedy the deficiencies of Downey. Strnad et al. discloses an “apparatus for spinal fixation 10” having “extending plates 202” and corresponding “apertures 204” that are “adapted

to receive cortical or biocortical screws (not shown) for attachment to the vertebral bodies 12.” The disclosed cortical or biocortical screws are not pedicle screws and the “extended plates 202” do not function as a pedicle screw retainer for receiving pedicle screws extending through a pedicle located adjacent to a pedicle screw retainer. In contrast, the screws extend through vertebrae above and below the resected vertebra for rigid attachment to the adjacent vertebrae. Because not all the elements of claim 61 are taught or suggested by the cited art, independent claim 61 and corresponding dependent claims 62-65 and 68-69 are patentable over the combination of Strnad et al. in view of Downey and are presented for reconsideration and allowance.

IV. Conclusion

Claims 1, 3, 5-13, 15, 17-18, 21-23, 25, 27-30, 32-34, 36-39, 41, 43, 61-66, and 68-70 are pending in the present application. Claims 10, 12, 18, 22, 28, 37, 43, 66, and 70 are presently withdrawn. The Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application, as amended, is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

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